

Intelligent Speed Breaker System Design for Vehicles using Internet of Things

Code :

```
#define BLYNK_TEMPLATE_ID "TMPL3pKRUEdqV"
#define BLYNK_TEMPLATE_NAME "SMART ROBOT"
#define BLYNK_AUTH_TOKEN "b4QDqT2buT_tFvt0XT7sJdLqW9sXCUJC"

char auth[] = BLYNK_AUTH_TOKEN;
char ssid [] = "SVTECHNOLOGIES";
char pass [] = "Smart.23";

#define BLYNK_PRINT Serial
#include <ESP8266WiFi.h>
#include <BlynkSimpleEsp8266.h>

#include<LiquidCrystal.h>
#include <LiquidCrystal_I2C.h>
LiquidCrystal_I2C Lcd(0x27,16,2);
#include <Wire.h>

void setup()
{
    Blynk.begin(auth, ssid, pass);
    Serial.begin(115200);
    pinMode (D3,INPUT);

    pinMode (D5,OUTPUT); //RELAY MODULE
```

```
pinMode (D6,OUTPUT); //BUZZER
```

```
pinMode (D7,OUTPUT); //BLUE LED
```

```
Lcd.begin();
```

```
Lcd.setCursor(0,0);
```

```
Lcd.print(" WELCOME TO ");
```

```
Lcd.setCursor(0,1);
```

```
Lcd.print(" SMART VEHICLE ");
```

```
delay(3000);
```

```
digitalWrite(D6,HIGH);
```

```
digitalWrite(D7,HIGH);
```

```
delay(700);
```

```
digitalWrite(D6,LOW);
```

```
digitalWrite(D7,LOW);
```

```
delay(700);
```

```
digitalWrite(D6,HIGH);
```

```
digitalWrite(D7,HIGH);
```

```
delay(700);
```

```
digitalWrite(D6,LOW);
```

```
digitalWrite(D7,LOW);
```

```
delay(700);
```

```
digitalWrite(D6,HIGH);
```

```
digitalWrite(D7,HIGH);
```

```
delay(700);
```

```
digitalWrite(D6,LOW);
```

```
digitalWrite(D7,LOW);
```

```
delay(700);
```

```

}

void loop()
{
  Blynk.run();

  int S,V;

  S=digitalRead(D3);

  Blynk.virtualWrite(V3,S);

  if(S==1)
  {
    digitalWrite(D6,HIGH);
    digitalWrite(D7,HIGH);

    Lcd.setCursor(0,0);
    Lcd.print(" ALERT INFRONT ");
    Lcd.setCursor(0,1);
    Lcd.print(" SPEED BREAKER ");
    delay(3000);

    Lcd.setCursor(0,0);
    Lcd.print("A-MODE ACTIVATED");
    Lcd.setCursor(0,1);
    Lcd.print("VEHICLE SLOWDOEN");
    digitalWrite(D5, HIGH);
    digitalWrite(D6,HIGH);
    digitalWrite(D7,HIGH);
    delay(3000);
  }

  else
  {
    digitalWrite(D5,LOW);
    digitalWrite(D6,LOW);

```

```
digitalWrite(D7,LOW);  
Lcd.setCursor(0,0);  
Lcd.print("  WELCOME TO  ");  
Lcd.setCursor(0,1);  
Lcd.print(" SMART VEHICLE ");  
delay(3000);  
  delay(300);  
}  
Lcd.clear();  
}
```